OPPOSITION TO GENE PATENTING

## HON. LOUISE McINTOSH SLAUGHTER

OF NEW YORK

IN THE HOUSE OF REPRESENTATIVES Wednesday, June 22, 2011

Ms. SLAUGHTER. Mr. Speaker, I rise today in opposition to gene patenting. The sequencing of the human genome was the most momentous medical achievement in this century, with unparalleled implications for patients and our economy. And we cannot squander that success by patenting genes.

The Human Genome Project has helped our economy to grow by \$796 billion. Today, 310,000 American jobs are linked to the sequencing of the Human Genome. Furthermore, personalized medicine has transformed the way doctors care for patients. According to the American Medical Association, more than 1,200 genetic tests can be used today to help diagnose and treat over 1,000 different diseases. Personalized medicine helps to provide safer, more cost-effective medicine.

Yet, to fully realize the potential of personalized medicine, we must ensure that our laws and policies keep pace with our science. Today as we consider the patent bill, I would like to clarify the intersection between genes and patents.

Many of us carry within us genes that predispose us to illnesses or influence the effectiveness of medications. These genes are natural products—not inventions. And as natural products, they should not be patented. It's this simple: just as a kidney cannot be patented, genetic sequences should not be patented.

Unfortunately, 20 percent of our genes have already been claimed as intellectual property. For several decades, the U.S. government issued patents on genes. Thankfully the Department of Justice recognized this clear overreach on the part of the United States Patent and Trademark Office—and moved to correct this mistake.

On October 29, 2010, the United States Department of Justice filed an amicus brief in which they explained: "the unique chain of chemical base pairs that induces a human cell to express a BRCA protein is not a 'humanmade invention.' Nor is the fact that particular natural mutations in that unique chain increase a woman's chance of contracting breast or ovarian cancer. Indeed, the relationship between a naturally occurring nucleotide sequence and the molecule it expresses in a human cell—that is, the relationship between genotype and phenotype-is simply a law of nature. The chemical structure of native human genes is a product of nature, and it is no less a product of nature when that structure is 'isolated' from its natural environment than are cotton fibers that have been separated from cotton seeds or coal that has been extracted from the earth."

The United States Department of Justice has come to the inevitable conclusion that genes are natural products, and not fit for patenting. And last year, a federal court in New York came to the same conclusion.

Not only is the issuance of patents on genes wrong, contrary to common sense, and in violation of Congressional intent, but it also damages human health. Gene patents have cut off access to important tests. For example, the company that owns sole rights to the BRCA1 and BRCA2 sequences—which deter-

mines hereditary risk factors around breast and ovarian cancer—charges between \$3,000 and \$4,000 for a single test. Other laboratories have offered to perform the test for several hundred dollars, but are not able to do so because of the patent on those particular genetic sequences. And the information provided by this test is critical for medical decision-making: Up to 85 percent of those individuals who possess these genetic sequences will be diagnosed with breast cancer at some point in their life. By granting a monopoly, we risk placing these genetic tests out of reach for patients.

Furthermore, gene patents stop innovation in their tracks. They prevent anyone outside of the patent holder from studying the gene sequence under patent. As Dr. Stieglitz of Columbia, a Nobel Prize winning economist, wrote, "Our genetic makeup is far too complicated for a single entity to hold the keys to any given gene and to be able to choose when, if ever, to share." We threaten scientific advancement, if we do not allow scientists to untangle the manifold implications of specific gene sequences. We can not reap the full benefits of personalized medicine if researchers must go to hundreds of different patent holders to analyze one patient's genome.

The battle to keep policy and science marching hand in hand has been a long one, and I worked for dozens of years to ensure that the nation's laws support genetics policy.

In 1995, I introduced legislation, entitled the Genetic Information Nondiscrimination Act (GINA), in order to prevent genetic discrimination. For personalized medicine to flourish, patients needed to be able to get genetic tests without the fear that it would endanger their employment or their health insurance. Thirteen years after I first introduced GINA, it was passed into law. GINA is one of the nation's great civil rights laws, which has helped open the door to personalized medicine.

By passing GINA in 2008, the U.S. Congress showed itself to be at the forefront of genetics policy. I expect no less of our government when it comes to gene patenting. Today, the Patent Office has the opportunity to institute evidence-based policy and end the patenting of genes, and it must do so.

AGRICULTURE, RURAL DEVELOP-MENT, FOOD AND DRUG ADMIN-ISTRATION, AND RELATED AGENCIES APPROPRIATIONS ACT, 2012

SPEECH OF

## HON. NIKI TSONGAS

OF MASSACHUSETTS

IN THE HOUSE OF REPRESENTATIVES  $Tuesday,\,June\,\,14,\,2011$ 

The House in Committee of the Whole House on the State of the Union had under consideration the bill (H.R. 2112) making appropriations for Agriculture, Rural Development, Food and Drug Administration, and Related Agencies programs for the fiscal year ending September 30, 2012, and for other purposes:

Ms. TSONGAS. Madam Chair, I missed votes on the day of June 16, 2011, because I traveled back to my district to attend the funeral service for a Marine killed in combat, Corporal William Woitowicz. Had I been

present, I would have voted for amendments to the FY 2012 Agriculture, Rural Development, and Food and Drug Administration Appropriations Act that encourage local and regional food systems and fund programs that support the work of minority and socially disadvantaged farmers. I also would have supported amendments that protect taxpayer funds by implementing modest restrictions on excessive farm subsidy payments.

I would have voted against amendments that seek to delay the Commodity Futures Trading Commission's efforts to enforce commonsense rules on risky derivative swaps and other financial transactions, prevent the Department of Agriculture from implementing their climate change adaption policy, or propose deeper cuts to the FDA that would hinder the agency's ability to protect our nation's food supply from food-borne illnesses.

Finally. I would have opposed passage of the overall FY 2012 Agriculture, Rural Development, and Food and Drug Administration Appropriations Act because of the bill's drastic and indefensible cuts to the Women, Infants, and Children, WIC, program, which provides vital aid for our nation's most vulnerable pregnant women, infants and children. In the last year, WIC provided nutritious food, counseling on healthy eating, and health care referrals to thousands of women and children in my state. Additionally, the underlying bill undermines commonsense financial rules, choosing to protect Wall Street speculators that are driving up gas prices over the American taxpayer. Likewise, I cannot support the deep cuts in FDA funding included in the bill that will severely undermine food safety efforts and increase the risk of food-borne illnesses.

RECOGNIZING PRINCIPAL RICHARD JONES' DECADES OF SERVICE TO OUR COMMUNITY AS A LEADER IN EDUCATION

## HON. GARY C. PETERS

OF MICHIGAN

IN THE HOUSE OF REPRESENTATIVES Wednesday, June 22, 2011

Mr. PETERS. Mr. Speaker I rise today to recognize Mr. Richard Jones, the distinguished principal of North Farmington High School, on the occasion of his retirement after nearly 25 years of service to the families and students of Farmington Hills, Michigan through his work as an educator, administrator and community leader.

Mr. Richard Jones started his career in education nearly four decades ago and has been part of the Farmington Hills school district family for the last quarter of a century. He thrived as an English teacher and also a football and tennis coach, creating a comfortable learning environment where students were able to succeed and flourish. After many years in the classroom and on the field, he was made principal of the high school in 1998.

As principal, Mr. Jones treated every student, parent and teacher with dignity and respect. He is someone the students trusted and the teachers looked to for advice. His main goal was always to have a school unified by a message of tolerance and acceptance. During his time as principal he implemented many innovative school-wide programs on issues